



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/977,644	11/24/1997	RALPH EMERSON	PROG.003.00U	3349

7590 10/27/2003

DAVID J. BREZNER,  
FLEHR HOHBACH TEST ALBRITTON 7 herbert llp  
4 embarcadero center, suite 3400  
SAN FRANCISCO, CA 94111

EXAMINER
----------

LEVY, NEIL S

ART UNIT	PAPER NUMBER
----------	--------------

1616

DATE MAILED: 10/27/2003

32

Please find below and/or attached an Office communication concerning this application or proceeding.



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
--------------------	-------------	-----------------------	---------------------

EXAMINER
----------

ART UNIT	PAPER NUMBER
----------	--------------

DATE MAILED:

32

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

**OFFICE ACTION SUMMARY**

- ☒ Responsive to communication(s) filed on 6/11/03
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire \_\_\_\_\_ month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**

- ☒ Claim(s) 1, 4, 5, 7, 8, 10, 12, 13, 14, 16, 18-24 is/are pending in the application.
- Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1, 4, 5, 8, 10, 12-14, 16, 19-24 is/are rejected.
- ☒ Claim(s) 1, 18 is/are objected to.
- ☒ Claims \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- ☒ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

**- SEE OFFICE ACTION ON THE FOLLOWING PAGES -**

Receipt is acknowledged of RCE and amendment, of 6/11/03, respectively.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

Claims 22-24 are rejected as being based upon a defective reissue supplemental oath under 35 U.S.C. 251. See 37 CFR 1.175. The nature of the defect is set forth above.

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251. An example of acceptable language to be used in the supplemental oath/declaration is as follows:

"Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant."

In addition, applicant has not identified any error associated with the new claims; in fact inclusive of 19-24. The oath of 4/7/03 does not cover 22-24.

Claims 22, 24, 1, 4, 5 and 23 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for bait or aqueous formulations, does not reasonably provide enablement for solid support. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims. Support identified by applicant, for claims 23 and 24 is directed at sprayed-on emulsions,

Art Unit: 1624

aqueous, but there is no directions on attachment of coniferyl or cinnamic aldehydes to a solid support.

No support is seen for ants, where pointed to by applicant, for solid support (claim 22) or claim for 1 support. The rejection is maintained over claims 1, 4, 5 as regards ants. Reference 5405989, to which applicant directs us, is addressed to Mites; not ants, not arachnids. Note also, the date of availability to the practitioner in the art and arachnid controlling arts, is after the instant filing date; thus the reference wouldn't have been available, and applicant does not show support for these creatures. Note also no coupling of any active to a solid support, is taught by 5405989. Likewise, the available publication would have been WO 94124859 not the US Patent. There is no coupling to solid supports, of actives. At WO, again, we find no arachnids, no ants-the rejection of record is maintained, as regards claim 7 as the basis for new claim 23, as addressed to Ants, Arachnids and Fleas. No methods are addressed, in the specification, supporting claim 23, showing application effective to kill ants, mites or fleas of support coupled aldehyde.

Furthermore, amended, and new claims, now require either cinnamic aldehyde or coniferyl, but exclude the combination-we find, as indicated above, no support for solid supports with coupled coniferyl aldehydes effective in control methods.

Claims 1, 4, 5, 19, 20 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make

and/or use the invention. Cinnamic aldehyde in aqueous formulation would be oxidized to the acid-claims require an antioxidant compound limited to the 2 claimed compounds, but coniferyl aldehyde is excluded-examiner fails to find any identification of antioxidant compounds within the confines of claims 1, 10, 22 in the instant specification.

There is no way one would use cinnamic aldehyde as an antioxidant, since applicant says US 4978686 shows the need to add antioxidant (col.1, lines 45-47); the "other than" proviso can not be met.

Claims 19, 20, 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the specification identifying a specific aromatic aldehyde as an antioxidant, that examiner can find. The claims now require either cinnamic or coniferyl; when cinnamic, there is no antioxidant, thus the "other than" proviso of claim 1 and 22 can not be met.

Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no proper antecedent for ants, mites, fleas.

Claim 1, 4, 5 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 14-16, 29-39 of copending Application No. 08/860,499. Although the conflicting claims are not

identical, they are not patentably distinct from each other because there is no proper antecedent for ants, mites, fleas.

The rejection of record is maintained, as applicant defers responding, and no terminal disclaimer has been filed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 8, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hutchings 4861514 or Burrell et al 530670.

Hutchings see example 6, claim 16, and col.5, lines 9-10; cinnomic aldehyde is specifically especially utilized, at 0.0-1% (col.6, lines 55-59) cinnamic aldehyde is included as perfume of (C) (col.4, lines 66-6 of 5-line 70) at .2%, it meets the instant claim 8 requirements, as a soap, or cleaner, with salt of polyprotic acid-at 1, 3 or 5% sulfate or sulfonate, at example 6. Since the concentration is 0.2%.(2g/L), it would kill all that the instant formulations would kill.

There is no added antioxidant.

Burrell: see examples 6, 7-16% salt of polyprotic acid and 0.04g/L cinnamic aldehyde.

Claims 7, 12-14, 21 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Howell et al 5102675 with explanation of Twydell et al 4833158 or Thoms et al 5691383.

The rejection of record is maintained.

Twydell shows, as applicant argues for factual support, that wood can be suitable as bait for termites, examples used wood blocks to attract termites. Column 1, top show timber, wood needs to be protected from termite attack, thus, wood is suitable bait.

Thoms also shows cellulosic material is termite bait (col.4, lines 8-10, 14-16, 21-26). No patentable weight is given to where or how the compositions are used.

Claims 7, 12-14, 16, 21, 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Ando et al JP 3-268901 or Tanaka-JP 4176460 or Sugamoto-JP-3081202.

Ando-The rejection of record is maintained: wood is a bait, to termites, so Ando provides suitable compositions. Broadly stated, what is instantly claimed is a composition coupled to a solid support. Ando's composition is paint-when cured, it is coupled to a solid support-wood; cellulose containing, as is known to the artisan of ordinary skill. Reversible binding of the cinnamic aldehyde component is taught, as there is gradual release. There is no added antioxidant. Binding domains, of cellulose, are present by necessity-the paint is applied to wood flooring-see p.6 of translation-used

Art Unit: 1624

in houses, thus providing ingress and egress for insects. Although not coached in the intended language of the instant claims, the composition of Ando meets the instant compositional elements- As to coupling, binding and domains-they are not described in the instant application-

Applicant's arguments filed 6/11/03 have been fully considered but they are not persuasive. Applicant describes 3 patents allegedly providing cellulosic binding domains-however, Kilburn, 5202247, for example, addresses binding domains of an enzyme, polysaccharidase (col.2, summary). The substrate for the enzyme is a solid support of cellulose, although Ando was dropped, the wood is a bait for termites; while Ando's repellency of tick and mite and cockroach do not mitigate against the composition or its suitability-only against its use.

Tanaka: here,too, cinnamic aldehyde is applied, bound, to cellulosic material, paper, utilizing an adhesive, to provide the instant coupling-thus instant claims 7, 10, 12, 13, 14, 21 and 24 are met.

Claims 7, 10, 12-14, 16, 21, 23, 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugamoto-JP3-81202.

Sugamoto: the instant composition, no regard for intended use (here, to kill mites) of cinnamic aldehyde (p.4) in aqueous or solvent carrier, or coupled to solid supports-of cellulose-wood flour, cyclodextrin and(p.5) cotton, application of the compositions to mats, placed in houses, with egress-ingress-thus are the instantly claimed preparations, with instant efficacy (Test example 1) met.



Claims 8, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Sperti et al 4477361.

The compositions include polyprotic acid salts (versenol, example A; dioleate, col.4, lines 21-23).

The rejection of record is therefore maintained.

Claims 1, 4, 5, 8, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Narasaki et al-JP 64016706.

This reference incorporates cinnamic aldehyde (p.10 and p.4, translation last line) in compositions to kill Flies (top, p.7), mites, cockroach, and termite (p.8) in aqueous compositions (p.9). Test applications showed 100% efficacy in killing mites (test example 5) with aqueous solution, without antioxidants, at the instant concentration calcium-sulfonate can be used; a polyprotic acid salt (p.11) Detergent formulations are evident in that emulsions are used (p.9).

The amendment filed 3/13/99 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: see below.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Art Unit: 1624

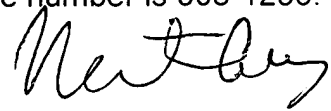
The incorporation of "cellulose", to replace "cellulase", is not found to be supported. Applicant refers to 3 patents as supporting the coupling to solid support. This material was not incorporated by reference, thus can not be transported to this application. The cited references refer to cellulase binding domains-there is insufficient description in the present application to provide direction for either a cellulose binding site coupling or a cellulase site coupling, and the coupling is to the aldehyde, not a composition. The change from cellulase to cellulose is not seem as supported-it was not identified as an error. Had this been a typo, a certificate of correction would have been the correct instrument-it was not so used.

Applicant's arguments filed 6/11/03 have been fully considered but they are not persuasive. Applicants arguments, where persuasive, have resulted in withdrawal of rejections-however, prior art still is seen as providing instant compositions, and some methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil Levy whose telephone number is 308-2412. The examiner can normally be reached on Tuesday- Friday 7:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 308-2927. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1235.

  
NEIL S. LEVY  
PRIMARY EXAMINER